Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

No Admission. The claims presented below are labeled pursuant to the request of the Patent and Trademark Office for convenience in examination. The cancellation of a claim or reference to a claim as "currently amended" is not an admission that the claim was altered for any reason related to patentability. None have been so altered.

1-15. (Cancelled).

16. (Previously Presented) A method of treating a human subject having a wound, which comprises administering to the wound a connexin 43 anti-sense polynucleotide, whereby connexin 43 protein expression is downregulated.

17. (Previously Presented) A method of reducing cell death resulting ~~t~~ from a neuronal insult to a human subject, which comprises administering to the site of the neuronal insult a connexin 43 anti-sense polynucleotide, whereby connexin 43 expression is downregulated.

18. (Previously Presented) A method according to claim 17 wherein the neuronal insult is to the brain, spinal cord or optic nerve.

19. (Previously Presented) A method according to claim 17 in which said anti-sense polynucleotide is administered in a sufficient amount to downregulate connexin 43 expression for at least 24 hours post-administration.

20. (Previously Presented) A method of promoting wound healing in a human which comprises the step of administering to the wound an amount of a connexin 43 anti-sense polynucleotide effective to downregulate connexin 43 expression .

21. (Previously Presented) A method according to claim 16 or 20 in which the wound is the result of trauma.

22. (Original) A method according to claim 21 in which trauma is a burn.

23. (Previously Presented) A method according to claim 16 or 20 in which the wound is the result of a surgery.

24. (Previously Presented) A method of treating a human subject to reduce inflammation associated with a wound or associated with a tissue subjected to a physical trauma which comprises the step of administering to the wound or tissue an amount of a connexin 43 anti-sense polynucleotide effective to downregulate connexin 43 expression.

25. (Previously Presented) A method according to claim 24 in which the tissue subjected to physical trauma is selected from the group consisting of brain, spinal cord and optic nerve.

26. (Previously Presented) A method of decreasing scar formation following a wound to a human subject which comprises administering to the wound an amount of a connexin 43 anti-sense polynucleotide effective to downregulate a connexin 43 expression.

27-42. (Cancelled)

43. (Previously Presented) A method according to claim 16, wherein said anti-sense polynucleotide is an oligodeoxynucleotide.

44. (Previously Presented) A method according to any of claims 16, 17, 20, 24, or 26 wherein said connexin protein comprises the amino acid sequence coded for by SEQ ID NO. 12.

45. (Previously Presented) A method according to any of claims 16, 17, 20, 24, or 26 wherein said anti-sense polynucleotide is present in a composition a pharmaceutically acceptable carrier or vehicle.

46. (Previously Presented) A method according to claim 45, wherein said composition is suitable for topical administration.

47. (Previously Presented) A method according to claim 45, wherein said composition is formulated to provide sustained release of the antisense polynucleotide.

48. (Previously Presented) A method according to claim 45, wherein said composition is formulated to provide sustained release of the antisense polynucleotide over at least 24 hours.

49. (Previously Presented) A method according to claim 44, wherein the anti-sense polynucleotide is present in a composition comprising a pharmaceutically acceptable carrier or vehicle formulated for topical administration.

50. (Previously Presented) A method according to claim 44, wherein the anti-sense polynucleotide is in the form of an impregnated dressing.

51. (Previously Presented) A method according to claim 45, wherein the pharmaceutically acceptable carrier or vehicle is, or includes, a gel.

52. (Previously Presented) A method according to claim 51 in which the gel is a nonionic polyoxyethylene-polyoxypropylene copolymer gel.

53. (Previously Presented) A method according to claim 45, wherein the composition further includes a surfactant.

54. (Previously Presented) A method of decreasing cell death in a tissue of a mammal comprising contacting the cells with an effective amount of a connexin 43 antisense polynucleotide.

55. (Previously Presented) The method of claim 54, wherein said connexin 43 antisense polynucleotide is an oligodeoxynucleotide.

56. (Previously Presented) The method of claim 55, wherein said oligodeoxynucleotide is an unmodified phosphodiester oligomer.

57. (Previously Presented) The method of any of claims 16, 17, 20, 24, 26 or

54, wherein said connexin 43 antisense polynucleotide binds to at least a portion of a connexin 43 mRNA.

58. (Previously Presented) The method of claim 57, wherein said connexin 43 antisense polynucleotide is exactly complementary to at least a portion of said connexin 43 mRNA.

59. (Previously Presented) The method of claim 57, wherein said connexin 43 antisense polynucleotide is not exactly complementary to at least a portion of a connexin 43 mRNA.

60. (Previously Presented) The method of any of claims 16, 17, 20, 24, 26 or 54, wherein said connexin 43 antisense polynucleotide is about 12 to about 40 nucleotides in length.

61. (Previously Presented) The method of any of claims 16, 17, 20, 24, 26 or 54, wherein said connexin 43 antisense polynucleotide is about 30 nucleotides in length.

62. (Previously Presented) The method of any of claims 16, 17, 20, 24, 26 or 54, wherein said connexin 43 antisense polynucleotide comprises SEQ ID NO: 1.

63. (Previously Presented) The method of any of claims 16, 17, 20, 24, 26 or 54, wherein said connexin 43 antisense polynucleotide comprises SEQ ID NO: 2.

64. (Previously Presented) The method of any of claims 16, 17, 20, 24, 26 or 54, wherein said connexin 43 antisense polynucleotide comprises SEQ ID NO: 3.

65. (Previously Presented) The method of claim 54, wherein said connexin 43 is a human connexin 43.

66. (Previously Presented) The method of claim 54, wherein said mammal is a human.

67. (Previously Presented) The method of claim 54, wherein said tissue is skin.

68. (Previously Presented) The method of claim 24 or 54, wherein said tissue is neural tissue.

69. (Previously Presented) The method of claim 24 or 54, wherein said tissue is brain.

70. (Previously Presented) The method of claim 24 or 54, wherein said tissue is spinal cord.

71. (Previously Presented) The method of claim 24 or 54, wherein said tissue is connective tissue.

72. (Previously Presented) The method of any of claims 54-56, 65, 66 or 67, wherein said connexin 43 antisense polynucleotide is administered to a wound.

73 (Previously Presented) The method of claim 72, wherein said wound is a surgical wound.

74. (Previously Presented) The method of claim 72, wherein said wound is a burn.

75. (Previously Presented) The method of any of claims 54-56, 65, 66 or 67, wherein said connexin 43 antisense polynucleotide is administered to a site of inflammation.

76. (Previously Presented) The method of any of claims 54-56, 65, 66 or 67, wherein said connexin 43 antisense polynucleotide is disposed in a topical formulation.

77. (Previously Presented) The method of claim 76, wherein said topical formulation comprises a gel.

78. (Previously Presented) The method of claim 77, wherein said gel is a pluronic gel.

79. (Previously Presented) The method of any of claims 54-56, 65, 66 or 67, wherein said connexin 43 antisense polynucleotide is administered by syringe.

80. (Previously Presented) The method of any of claims 54-56, 58, 59 or 65-67, wherein said connexin 43 antisense polynucleotide is administered as a gel.

81. (Currently amended) The method of ~~any of~~ claim 57, wherein said connexin 43 antisense polynucleotide is administered as a gel.

82. (Currently amended) The method of ~~any of~~ claim 60, wherein said connexin 43 antisense polynucleotide is administered as a gel.

83. (Currently amended) The method of ~~any of~~ claim 61, wherein said connexin 43 antisense polynucleotide is administered as a gel.

84. (Currently amended) The method of ~~any of~~ claim 62, wherein said connexin 43 antisense polynucleotide is administered as a gel.

85. (Currently amended) The method of ~~any of~~ claim 63, wherein said connexin 43 antisense polynucleotide is administered as a gel.

86. (Currently amended) The method of ~~any of~~ claim 64, wherein said connexin 43 antisense polynucleotide is administered as a gel.

87. (Currently amended) The method of ~~any of~~ claim 68, wherein said connexin 43 antisense polynucleotide is administered as a gel.

88. (Currently amended) The method of ~~any of~~ claim 69, wherein said connexin 43 antisense polynucleotide is administered as a gel.

89. (Currently amended) The method of ~~any of~~ claim 70, wherein said connexin 43 antisense polynucleotide is administered as a gel.

90. (Currently amended) The method of ~~any of~~ claim 71, wherein said connexin 43 antisense polynucleotide is administered as a gel.

91. (Previously Presented) The method of any of claims 54-56, 58, 59 or 65-67, wherein said connexin 43 antisense polynucleotide is administered as a dressing.

92. (Currently amended) The method of ~~any of~~ claim 57, wherein said connexin 43 antisense polynucleotide is administered as a dressing.

93. (Currently amended) The method of ~~any of~~ claim 60, wherein said connexin 43 antisense polynucleotide is administered as a dressing.

94. (Currently amended) The method of ~~any of~~ claim 61, wherein said connexin 43 antisense polynucleotide is administered as a dressing.

95. (Currently amended) The method of ~~any of~~ claim 62, wherein said connexin 43 antisense polynucleotide is administered as a dressing.

96. (Currently amended) The method of ~~any of~~ claim 63, wherein said connexin 43 antisense polynucleotide is administered as a dressing.

97. (Currently amended) The method of ~~any of~~ claim 64, wherein said connexin 43 antisense polynucleotide is administered as a dressing.

98. (Currently amended) The method of ~~any of~~ claim 68, wherein said connexin 43 antisense polynucleotide is administered as a dressing.

99. (Currently amended) The method of ~~any of~~ claim 69, wherein said connexin 43 antisense polynucleotide is administered as a dressing.

100. (Currently amended) The method of ~~any of~~ claim 70, wherein said connexin 43 antisense polynucleotide is administered as a dressing.

101. (Currently amended) The method of ~~any of~~ claim 71, wherein said connexin 43 antisense polynucleotide is administered as a dressing.